

AMENDMENTS TO THE CLAIMS

Claims 1-96. (Canceled)

97. (Currently amended) A sequencing chip plate support comprising an array of microchips, each of said microchips comprising an array of oligonucleotide probes immobilized on the surface of each of said microchips.

98-156. (Canceled)

157. (New) The support of claim 97 wherein the microchips are separated by physical barriers.

158. (New) The support of claim 97 wherein the microchips are separated by hydrophobic surfaces.

159. (New) The support of claim 97 wherein the microchips are arranged in multiple rows and columns.

160. (New) The support of claim 97 wherein the microchips are positioned for used with multichannel pipet.

161. (New) The support of claim 97 combined as a kit with at least one component selected from: hybridization buffer, washing buffer, control DNA, a set of labeled probes, ligation enzyme, chemical ligation agent, and ligation buffer.

162. (New) The support of claim 97 wherein the microchips are arrayed in an 8 times 12 format.

163. (New) The support of claim 97 wherein there is more then 256 oligonucleotide probes per array.

164. (New) The support of claim 97 wherein the oligonucleotide probes are between about 4 and about 9 bases in length.

165. (New) The support of claim 97 wherein the oligonucleotide probes are prepared on the microchip via a light-directed oligonucleotide synthesis.

166. (New) A support comprising multiple arrays of immobilized oligonucleotides.

167. (New) The support of claim 166 wherein the arrays of oligonucleotide are separated by physical barriers.

168. (New) The support of claim 166 wherein the arrays of oligonucleotides are separated by hydrophobic surfaces.

169. (New) The support of claim 166 wherein the arrays of oligonucleotides are arranged in multiple rows and columns.

170. (New) The support of claim 166 wherein the arrays of oligonucleotides are positioned for used with multichannel pipet.

171. (New) The support of claim 166 combined as a kit with at least one component selected from: hybridization buffer, washing buffer, control DNA, a set of labeled probes, ligation enzyme, chemical ligation agent, and ligation buffer.

172. (New) The support of claim 166 wherein the arrays of oligonucleotides are arrayed in an 8 times 12 format.

173. (New) The support of claim 166 wherein there is more then 256 oligonucleotides per array.

174. (New) The support of claim 166 wherein the oligonucleotides are between about 4 and about 9 bases in length.

175. (New) The support of claim 166 wherein the oligonucleotides are prepared on the support via a light-directed oligonucleotide synthesis.

176. (New) A method to obtain probe:nucleic acid fragment complexes comprising the step of contacting the support of claim 97 or claim 166 with a nucleic acid fragment under condition that permit complex formation between a oligonucleotide probe on the support and the nucleic acid fragment.